



Velvet Antler Judging Handbook

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The art of judging velvet antler has been evolving for the last 20+ years in North America and for a considerable longer period in New Zealand and Asia. As with any type of judging there are always different views and usually the emotion associated with each view can be very strong. Marketability of the antler and genetic evaluation of the animal are the two primary considerations when judging velvet antler. It is important to note that one of these focuses should not be viewed in isolation of the other as the results will be skewed.

Marketability, while it is important for producers to provide what is most desirable to the buyers, this cannot be the single focus of a velvet antler competition. Judging at an antler competition cannot become a “grading system”. Also, velvet antler is not the only antler market for the elk industry, for example, the trophy industry is also a very important market. It is important to understand that velvet antler marketability is a moving target therefore the industry must be flexible enough to meet these changing demands.

Genetic evaluation, including heritable traits is a very important tool for all antler aspects of the elk industry. Ongoing genetic improvements lead to greater quality and quantity of velvet antler and optimum trophy antler production. Ultimately the result for producers lies in greater marketability of their velvet antler and of their animals for breeding stock and trophy markets.

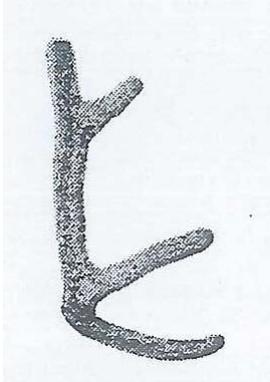
Alberta producers have recognized the importance of numerous revenue stream capabilities over relying on a single market. Thus, the complexity of judging antler production in the velvet stage is evident. Producers must be awarded appropriately for their breeding and herd management skills while being ever mindful of all the various challenges and opportunities to market their various products.

The Alberta Elk Commission Antler Judging Committee has completed an extensive review of various other judging systems such as those used by NAEBA and New Zealand, and even Korea. The committee has also dissected the system Alberta has used for the past number of years.

Velvet antler judging is not an exact science. It requires years of experience and it must evolve as markets do. This Velvet Judging Handbook is a guideline only. Its goal is to provide a set of standards that velvet antler judges can use as a guideline while ensuring that “judge’s discretion” remains a vital part of the overall system. Velvet antler judging requires experience, knowledge, vision and a commitment to excellence for the future growth and development of all aspects of the elk farming industry.

The Alberta Elk Commission is committed to the evolution of this handbook over time. The antler judging committee will need to evaluate the overall results of the antler competition on an annual basis to ensure this handbook remains relevant and is a meaningful tool for all future antler competitions.

The Certified Weight Index (CWI) is a total score for the antler that is derived from the following categories or traits:



Weight
Beam Points
Tines
Balance
Velvet Growth Assessment
Presentation
Appeal

A brief outline of the judging guidelines of each of these categories is as follows:

WEIGHT:

There has always been a focus on antler size, in fact in some of our markets “Bigger is better”, AS LONG AS THE QUALITY IS NOT COMPROMISED!!!! In previous competitions, the weight score has simply been two times the actual weight. Advancements in breeding programs and herd management practices have resulted in increased velvet antler growth. Although completely desirable, it has had a negative impact on the overall judging system. Beginning in 2011, Alberta will delete the “two times” method and will calculate a weight multiplier based on the average weight of the velvet in each class each year. The weight multiplier used will attempt to closer balance the total points of the categories of tines, balance, velvet growth assessment (previously known as calcification), presentation, appeal to the weight points. The intended affect of this is meant to ensure that the judges have equal scoring opportunity between their maximum possible scores (65 points) and the bull’s weight score that has been determined by the weight multiplier used (as explained above).

BEAM POINTS:

Beam is an extremely important genetic trait that can enhance the animal’s capacity to grow additional high quality velvet. Studies show that every additional centimeter of beam circumference will allow 17% to 25% more volume to flow through the antler. That means that if you have two bulls with antlers that are the same except that one has a 20 cm beam and the other has a 17cm beam, that there will be over 50% more volume in the larger beamed bull. The baseline numbers are as follows:

AGE	BASELINE
2	13cm
3	14cm
4	15cm
5	16cm
6	17cm
Mature	18cm

Our current Beam measurement method works as follows:

For a 3-year-old bull:

One measurement taken at the smallest point between second and third tine

Right antler – C2 – 22.1

Lt Antler – C2 – 21.1

Calculation is then:

22.1 + 21.1=43.2 divided by 2 = 21.6 minus the baseline of 14 cm = Beam score 7.6

Beam Circumferences must be taken at a right angle to the longitudinal axis of the antler at the smallest point between typical tines, disregarding any non-typical tines that may be present.

Proposed change NOT TO BE USED FOR THE 2011 ELK EXPO: To use Average of the smallest C2 & C3 measurements per side

For a 3-year-old bull:

C2 measurement taken at the smallest point between second and third tines.

C3 measurement taken at the smallest point between the third and the top.

<i>Right antler</i>		<i>Lt Antler</i>	
<i>C2</i>	<i>C3</i>	<i>C2</i>	<i>C3</i>
<i>22.5</i>	<i>21.7</i>	<i>21.6</i>	<i>20.6</i>
<i>(22.5+21.7)/2</i>		<i>(21.6+20.6)/2</i>	
<i>AVG 22.1</i>		<i>AVG 21.1</i>	

The C3 measurement and a beam length measurement (base of antler to the bottom of the dimple) will be taken at the 2011 Elk Expo so as to be provided as “information only” AFTER the competition AND for the antler judging committee to evaluate its merit for possible future use within this velvet judging system.

TINES –Potential for 20 Points to be awarded:

Tine placement is viewed by many as strictly a conformation category with little relation to velvet production. This is very unfortunate as tine placement does impact velvet production and the decisions you make about velvet in many significant ways. Tine

placement is also important from a broader perspective in that it is very important in the trophy hunt market. We identified 3 main features that should be considered in judging tines: This category will account for 20 points total to be awarded

1. Placement – Potential for 12 points to be awarded of the 20 total for tines.

- *Misplaced Trez tines.*
 - a) While ideal trez tine placement is difficult to define, consensus is that the best placement is approximately 2/3 of the way up the beam.
 - b) A low Trez tine is thought to be more appealing than a high Trez tine in the velvet antler marketplace. This is not necessarily the case in the trophy market as this characteristic is often accompanied by a long beam. The position of the Trez tine will differ based on beam length and conformation.
 - c) Trez tine placement can sometimes make the top appear wider than it is depending at what stage of growth the antler is harvested.
- *Gaps between the Brow and the Bez tine* can increase the amount of antler that some buyers cut off and sell for a lower price. Consequently these gaps will lower the value of the total antler in that market.
- *Missing Tines*, regardless of where, they are equate to missed opportunity to grow velvet. This relates to loss of dollars. This also has a negative impact in the hard antler market.
- *Tine placement is very heritable.* The Breeders Three competition demonstrates that tine placement is very predictable with each sire.

For these reasons, tine placement is an important element in velvet antler judging criteria. There are a total of 12 points for tine placement. All of which can be used on one side if a judge deems necessary. When judging tine placement, the default score is the baseline and then deductions are taken as issues are identified. A guideline for normal deductions could include:

Gaps between the Brow and the Bez – gaps may earn deduction from 2 to 8 full points, per side depending on its size. A general rule of thumb would be:

greater than a 2 inch gap = 2 deduction
greater than a 3 inch gap = 4 deduction
greater than a 4 inch gap = 6 deduction
greater than a 5 inch gap = 8 deduction
Low Trez Tine = 4 deduction
High Trez Tine = 6 deduction

Any and all missing tines (for any reason) may receive a full 12 points of deduction. Extra Tines or kickers will be considered neutral. While extra tines take away from a typical elk antler style, they do add weight for the velvet market and inches for the trophy hunt market. There will be neither gain nor deduction for them.

2. Length & Conformation – Potential for 6 points to be awarded out of the 20 possible for tines. Each set of antler will start at the default score of 3 with points awarded or deducted at the judges discretion according to these attributes.

Tine conformation is an important consideration. Historically it had been felt that the perfect set of antler will have a conformation that distributes the velvet in a proportioned way that will create a right triangle when placed upright on a table: each tine from the base to the top should all just touch the table. Good strong length in ALL three tines is encouraged and although the “perfect” triangle configuration is important, deviations from this will not be penalized as heavily as in the past.

The following deductions **may** be assessed for differences in tine length. Minor difference of length is defined as approximately 1-2 inches and **may** result in a 1 point deduction. Any greater difference may result in a 2 point deduction. Length will be visually assessed and deductions assessed at the judges discretion.

Further, as a guideline:

- a) 1 to 2 point deductions may be assessed for every negative attribute of the tines to a maximum deduction of 0.
- b) 1 point may be awarded for every positive attribute of the tines to a maximum of 3 points.
- c) Points may be deducted for shortness of tines and allowances for additional points for extremely long tines. If points are longer than 20 inches .5 points may be rewarded for every inch after that.
- d) Conformation will place the emphasis on seeing thick, full tines. At the judges discretion points may be awarded based on the appearance of this style of tine.

3. Mirror Image – Potential for 2 points to be awarded of the 20 total for Tines

The purpose of this category is to further judge antler quality and traits. Therefore, if the antler does not look like an elk antler, this is where deductions can be taken. Any deduction of all or part of the 2 points should be applied to the “set” of antler and not the individual sticks. Normal attributes to be considered when assessing deductions in this category are:

- Difference in length of tines- if the difference is small (not really noticeable) the judge may use his discretion in accessing a deduction or not. If the difference in length is large (very noticeable) the deduction may be .5 points, however the deduction could be a full 1 point if the difference in length is excessive.
- A missing tine will receive a full 2 point deduction. Extra tines may also receive a full 2 point deduction.
- Difference of gap between tines – if the difference in the gap is small (not real noticeable) the judge will use his discretion in accessing a deduction or not. If the difference is large (very noticeable) the deduction may be .5 point, however the deduction could be a full 1 point if the difference is excessive.

- Difference in confirmation of tops – there are times when the development of the tops will be significantly different between the two sticks of antler that make up the set. We sometimes see a slingshot type top on one side and a web-type top on the other. In cases of extreme differences, a deduction of 2 points is in order. If differences are slight, deductions in .5 point increments may be in order. It is very important in this category for the judges to assess whether the difference in the tops is related to growth characteristics or is merely due to a delay in button drop dates between the two sticks of antler.

BALANCE: -- Potential for 20 points to be awarded

Balance is another trait that is critical to growing good quality and marketable velvet; it is also very heritable. From the point where the beam measurement (C2) is taken the beam should progressively get larger as you go up towards the top. Points may be assessed as follows:

- 0-5 Points For a beam that narrows at the top, use the range to reflect severity of this flaw
- 6-8 Points For a beam that is straight from top to bottom. Higher scores in range used to reflect a slight increase.
- 9-12 Points For beam that has a definite but small increase in diameter from bottom to top.
- 13-16 Points For beam that has a definite but medium increase in diameter from bottom to top.
- 17-20 Points For beam that has an excellent and large increase in diameter from the bottom to the top.

Judges should recognize that differences in top configuration (web vs slingshot) are not indicative either way of good balance or not. Balance is an important judging category in its significance to the velvet antler market BUT, it is also very important in assessing the next category - Velvet Growth Assessment. Any balance of 9 or less will require you to cut earlier than the guidelines indicate.

VELVET GROWTH ASSESSMENT – Potential for 20 points to be awarded

This category was formally known as “calcification”. Because calcification is very difficult to assess and find consensus on due to its many contributing attributes, the antler judging committee felt this category should be re-named. The primary concern here is that the antler being judged has been cut at the right stage of growth to maximize the price paid by the buyer without implementing a “grading system” within the competition judging criteria.

All available information from various sources relates beam circumference and balance with growth assessment therefore those categories are critical for the judges to use in determining points awarded in this category. Each stick should be analyzed individually

as well as together as differences in button drop dates between sticks will cause differences stick to stick in the final antler set entered in the competition

A rule of thumb that may be used is the top indentation (dimple) should not exceed 50% of the circumference. For example a 25 cm circumference would have a 12.5 cm indentation.

The following are guidelines for the judges in considering the score given in this category:

1) Beam size in relation to allowable dimple size:

The following chart illustrates the allowable size of the dimple in relation to the beam circumference at the C2. Any dimple that exceeds the maximum may be considered to indicate that the stick is overgrown. If the Velvet stick is over the ratio allowed by 10% then the Velvet Growth Assessment score will be reduced by 10% and so on.

For 2011 the Velvet Antler Judging Committee decided that the rule of thumb for size of allowable dimple would be 50% of the size of the diameter of the beam. The following table demonstrates this. (The yellow highlighted column is the 2011 guideline – the other percentages are for information only.)

Beam	70% cm	70% inches	60% cm	60% inches	50%cm	50% in
Beam diameter of less then 20 cm should be flat topped (no dimple at all).						
20cm	14cm	5.53"	12cm	4.74"	10cm	3.95"
21cm	14.7cm	5.8"	12.6cm	4.98"	10.5cm	4.15"
22cm	15.4cm	6.08	13.2cm	5.2"	11cm	4.34"
23cm	16.1cm	6.36"	13.8cm	5.45"	11.5cm	4.5"
24cm	16.8cm	6.6"	14.4cm	5.7"	12cm	4.7"
25cm	17.5cm	6.9"	15cm	5.9"	12.5cm	4.9"
26cm	18.2cm	7.2"	15.6cm	6.1"	13cm	5.1"
27cm	18.9cm	7.4"	16.2cm	6.3"	13.5cm	5.3"
28cm	19.6cm	7.7"	16.8cm	6.6"	14cm	5.5"
29cm	20.3cm	8"	17.4cm	6.8"	14.5cm	5.7"
30cm	21.0cm	8.2"	18.0cm	7.0"	15cm	5.9"
33cm	23.1cm	9.09"	19.8cm	7.8"	16.5cm	6.5"
35cm	24.1cm	9.6"	21cm	8.6"	17.5cm	6.9"

2) Pointy Tines – these should be assessed in conjunction with what the beam/dimple ratio and appearance is. As well, larger, thicker tines can go further than thin “pencil” tines before they begin to harden. Pointy or turned up tines may be an indication that the antler is overgrown and deductions as follows may be assessed.

Brow Tine – 2 point deduction

Bez Tine – 3 point deduction

Trez Tine – 5 point deduction

These deductions are cumulative.

3) Ribbing – as this can also be a heritable characteristic, it is not necessarily indicative of an antler that is overgrown. Again, judges should consider this in conjunction with the beam/dimple ratio and tine development.

4) Bottom cut – Because there is no consensus on the accuracy or true indicative value of this assessment judges are encouraged to use this for information only and not to base deductions on it. There are several reasons for this decision, some of which include:

- a) cut appearance can be altered by several factors including the kind of saw used to cut the antler. A finer tooth saw will leave a “more calcified” appearance to the cut.
- b) the location of the cut will influence the appearance as well; the lower you cut the more calcified the base of the antler will appear
- c) antler sticks should only be cut once. The base can be altered by trimming if the cut appears too calcified,
- d) colour of the cut is not necessarily indicative of hardening either as the colour may be altered and the temperature of the stick can also influence the vividness of the colour.

Any deviation from the ‘rules of thumb’ may result in deductions to the calcification score. Velvet Growth Assessment is an important category that the judges will use to assess whether the antler was cut at the optimum time. Properly cut antler will benefit from a high score within the 20 possible points for the CWI.

PRESENTATION: Potential for 2 points to be awarded.

Velvet is a food product so therefore producers should be concerned with cleanliness, spoilage and damage. Dirt on velvet antler is totally unacceptable and will suffer deductions. Anything that detracts from the antler’s value as a food product will be assessed deductions. Damaged antler will also result in deductions. Damage at the lower end will receive smaller deductions than if the damage is higher on the antler. As an example, a small 1-inch cut on the Brow tine will receive a .25 to .5 deduction, while the same size cut at the top of the antler will receive a full point or more in deductions. Any damage that results in the loss of a tine during processing will receive at least a full point deduction; if the damage is to the top of the antler the deduction could be as severe as the total 2 points allowed for both sides.

APPEAL: Potential for 3 points to be awarded.

The three points will be used at a judge’s discretion for his or her overall impression. Essentially, the judge will likely ask – “Would I breed my cows to this Bull?” The points can be used for confirmation, deductions for split beam or extra tines if judge feels that it is not desirable. It is important to note that various characteristics are more appealing to some judges than others so this category is really a wide open discretion category.